

What is claimed is ;

1. An operation mode switch apparatus for ensuring low power consumption, comprising:
 - 5 a control unit, for receiving a command signal so as to output a first control signal, a second control signal and a operation mode control signal;
 - a clock, for receiving the first control signal so as to make an evaluation to determine whether a clock signal should be
10 generated for the control unit; and
 - a timing device, for receiving the second control signal so as to make an evaluation to determine whether a timing signal should be outputted for the control unit to use.
2. The operation mode switch apparatus for ensuring low power consumption of claim 1, wherein the timing device further comprising:
 - 15 an oscillator, for outputting an oscillating signal; and
 - a counter, for receiving the second control signal and use thereof along with a counting of the oscillating signals to output the
20 timing signal.
3. The operation mode switch apparatus for ensuring low power consumption of claim 2, wherein the clock signal is a high accuracy clock signal.
4. An operation mode switching method for ensuring ultra low power consumption, which is used for switching the operation mode of the
25 working platform of a work station, the method comprising:
 - using only a timing device for timing the period that the working platform is in a second operation mode, when the working platform enters the second operation mode; and
 - 30 using only a high accuracy clock for providing clock to the working

platform in the first operation mode, when the working platform enters the first operation mode.

5. The operation mode switch method for ensuring low power consumption of claim 4, the method further comprising:

5 switching the working platform from the first operation mode to the second operation mode, while the time for the working platform to remain in the first operation mode is up.

6. The operation mode switch method for ensuring low power consumption of claim 5, the method further comprising:

10 activating the timing device and deactivating the high accuracy clock, while the working platform entering the first operation mode.

7. The operation mode switch method for ensuring low power consumption of claim 6, the method further comprising:

15 activating the high accuracy clock and deactivating the timing device, while the working platform entering the second operation mode

8. The operation mode switch method for ensuring low power consumption of claim 7, the method further comprising:

20 activating the timing device and deactivating the high accuracy clock, when the time for the working platform to remain in the first operation mode is up.

9. The operation mode switch method for ensuring low power consumption of claim 8, wherein the first operation mode is a sleep mode.

25

10. The operation mode switch method for ensuring low power consumption of claim 9, wherein the second operation mode is a wake-up mode.

11. The operation mode switch method for ensuring low power consumption of claim 4, wherein the first operation mode is a power-save mode.

30

12. The operation mode switch method for ensuring low power consumption of claim 4, wherein the first operation mode is a standby mode.